

## REMARKS

Claims 1-43 are pending in the application. Claims 15-18, 20, 21, 37-39, 41 and 42 are withdrawn.

Claims 1-9, 11-14, 19, 22-30, 32-34, 35, 36, and 40 are rejected.

The specification and drawings are objected to for informalities. Amendments to the specification are made herein to correct the informalities noted in the Office Action. Proposed drawings corrections are attached herewith. No new matter is entered.

With regard to the drawing objection to Figs. 8-12 and 16 and the improper cross-hatching, it is respectfully requested clarification be provided because the nature of the objection could not be determined. The Examiner is invited to telephone applicant's representative to clarify the objection. Regarding the objection to Fig. 3 ref. "27c", the specification has been amended to correct this typographical error.

Numerous objections to the claims were raised in the Office Action. The claims are amended to correct and clarify the objected to items.

Each of claims 1, 22, 35, as amended, includes the features of the claim 3. Claim 43 is amended to clarify applicant's claimed invention. New claim 44 is dependent on claim 35 and includes similar features as added to claim 43. These features are fully supported by the specification for example see page 47, lines 4-22. No new matter is entered.

Claim 43 is rejected under 35 U.S.C. § 102(b) as being clearly anticipated by either Davidson et al. (U.S. Patent 5,20,705) (Davidson) or Kubota et al. (JP Abstract of publication 09-129041) (Kubota).

Applicant's claim 43 recites a heat insulating type coaxial cable including a center conductor; an insulating member ... and an external conductor ... wherein the external conductor

is composed of a metal plating layer coating the insulating member at the periphery thereof and a resin layer coating the metal plating layer, and the metal plating layer having a cross-sectional area much smaller than that of the center conductor and the insulating member, the metal plating layer to serve as the heat insulating portion having a larger heat resistance to resist heat transmission on the metal plating layer.

It is respectfully submitted neither Davidson nor Kubota discloses the metal plating layer or the present invention having the larger heat resistance to prevent heat transmission on the metal plating layer. Therefore, the subject matter of claims 43 and 44 is not anticipated by Davidson nor Kubota.

Davidson discloses the outer conductor 120 wrapped in the insulation layer 140 to reduce heat absorption (see column 3, lines 24-26 of Davidson). Davidson teaches a transmission line cable connector, but fails to suggest the features of applicant's claimed invention.

Kubota discloses the outer conductor 10 to suppress the heat transfer (see Abstract). Kubota describes that the narrow part (10b) suppresses the heat but Kubota fails to teach the metal plating layer having a cross-sectional area much smaller than that of the center conductor and the insulating member. In applicant's claimed invention the metal plating layer to serve as the heat insulating portion having a larger heat resistance.

Claims 1-5, 8, 9, 11, 14, 19, 22-26, 29, 30, 32, 35, 36 and 40 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Fiedziuszko et al. (5,179,074) in view of Nicholson (UK Patent 2,235,828A) and further in view of Davidson et al.

Nicholson discloses the resonant element 3 and the final element 5. All of the individual elements, however, are constructed of only high temperature superconductive material, and Nicholson does not disclose the configuration of the present invention having the filter housing

an the columnar resonating member each of which is made of non super conductive material, and the inner wall of the filter housing and the surface of the columnar resonating member have metal plating applied, and a superconductive film made of superconductive material is formed on the surface of the metal plating.

Fiedziuszko teaches a hybrid dielectric resonator/high temperature semiconductor filter which includes ceramic resonators or ceramic plugs 14 disposed in the conductor housing. A portion of a sheet of superconductive material which is held at an ambient temperature below the critical temperature of the superconductor and disposed in contact with an opposing surface of each of the resonators. Surface of 16 abuts a thin layer 18 of the superconducting material which abuts an inner surface 20 of the conductive wall of housing 12. No superconductive columnar resonators are even suggested by Fiedziuszko.

Nicholson teaches a filter with a superconductive element 13 within a waveguide 12. A plurality of superconductive elements 13-16 may be provided to control the filter characteristics during the operation of the filter.

Fig. 1 A of Nicholson shows a comb-line wherein an input is derived from the first element 2 and the output is derived from the final element 5. However it is respectfully submitted that what is taught in Nicholson in view of the combined references would not suggest with the structure set forth on claims 1 and 22.

Because of applicant's unique combination of features and configuration, the present claimed invention achieves an easier and less expensive manufacturing of the superconductive filter.

For at least the foregoing reasons it is respectfully submitted claims 1, 22 and 35 would not have been obvious in view of the combination of Fiedziuszko, Nicholson and Davidson. Nor would one skilled in the art view the references and be led to applicant's claimed invention.

Claims 12, 33 are rejected under 35 U.S.C. 103 as being unpatentable over Fiedziuszko, Nicholson and Davidson at al., and further in view of Olsson.

Claims 6, 7, 8, 9, 13, 27 28, 29, 30 are rejected under 35 U.S.C. 103 as being unpatentable over the combination of Fiedziuszko, Nicholson and Davidson and further in view of Huang (5,838,213).


Claims 2-14 and 19 depend from the amended claim 1. Claims 23-34 depend from the amended claim 22, and claims 36, 40 and new claim 44 depend from the amended claim 35. The dependent claims are likewise in condition for allowance for at least the foregoing reasons and because they each recite additional features.

Please charge the amount of \$18.00 for one extra dependent claim to Deposit Account 50-1290.

In view of the remarks set forth above, this application is in condition for allowance which action is respectfully requested. However, if for any reason the Examiner should consider this application not to be in condition for allowance, the Examiner is respectfully requested to telephone the undersigned attorney at the number listed below prior to issuing a further Action.

Any fee due with this paper may be charged to Deposit Account No. 50-1290.

Respectfully submitted,

  
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